ROM INSIGHT SERIES

Ontario Prehistory

Peter L. Storck

ROYAL ONTARIO MUSEUM

This booklet illustrates some aspects of the changing ways of life of prehistoric peoples in Ontario from the time of man's first entry into this area at the end of the last Ice Age, some 10 000 to 12 000 years ago, until the coming of the Europeans in the 17th century. This booklet is dedicated to the memory of those peoples, to the discovery of their as yet untold story, and to our own greater appreciation of our common humanity.

Note: All artifacts illustrated in this booklet are from the collections of the Royal Ontario Museum. Notations given in parentheses at the end of some captions indicate the size of the photograph in relation to the actual artifact. For example, × 0.5 means that the object is shown at half life size.

Front Cover: Early Palaeo-Indian peoples in Ontario may have hunted barren-ground caribou. Painting by Mr. Paul Geraghty.

© Royal Ontario Museum, 1981
100 Queen's Park, Toronto, Ontario, Canada M5S 2C6
ISBN 0-88854-275-5

Photographs by William Robertson and Brian Boyle, Photography Department, ROM. Chart, p. 2, and maps, p. 32, drawn by Jean Lightfoot.

Canadian Cataloguing in Publication Data

Storck, Peter L., 1940–
Ontario prehistory
(ROM insight series)
Rev. ed. of: Royal Ontario Museum. Ontario prehistory gallery.
Bibliography: p.
ISBN 0-88854-275-5 (pbk.)

1. Indians of North America — Ontario — Antiquities.
2. Ontario — Antiquities. I. Royal Ontario Museum.
Ontario prehistory gallery. II. Title. III. Series.

E78.05S86 1981 971.3'01 C81-094141-4

Printed and bound in Canada by THE ALGER PRESS

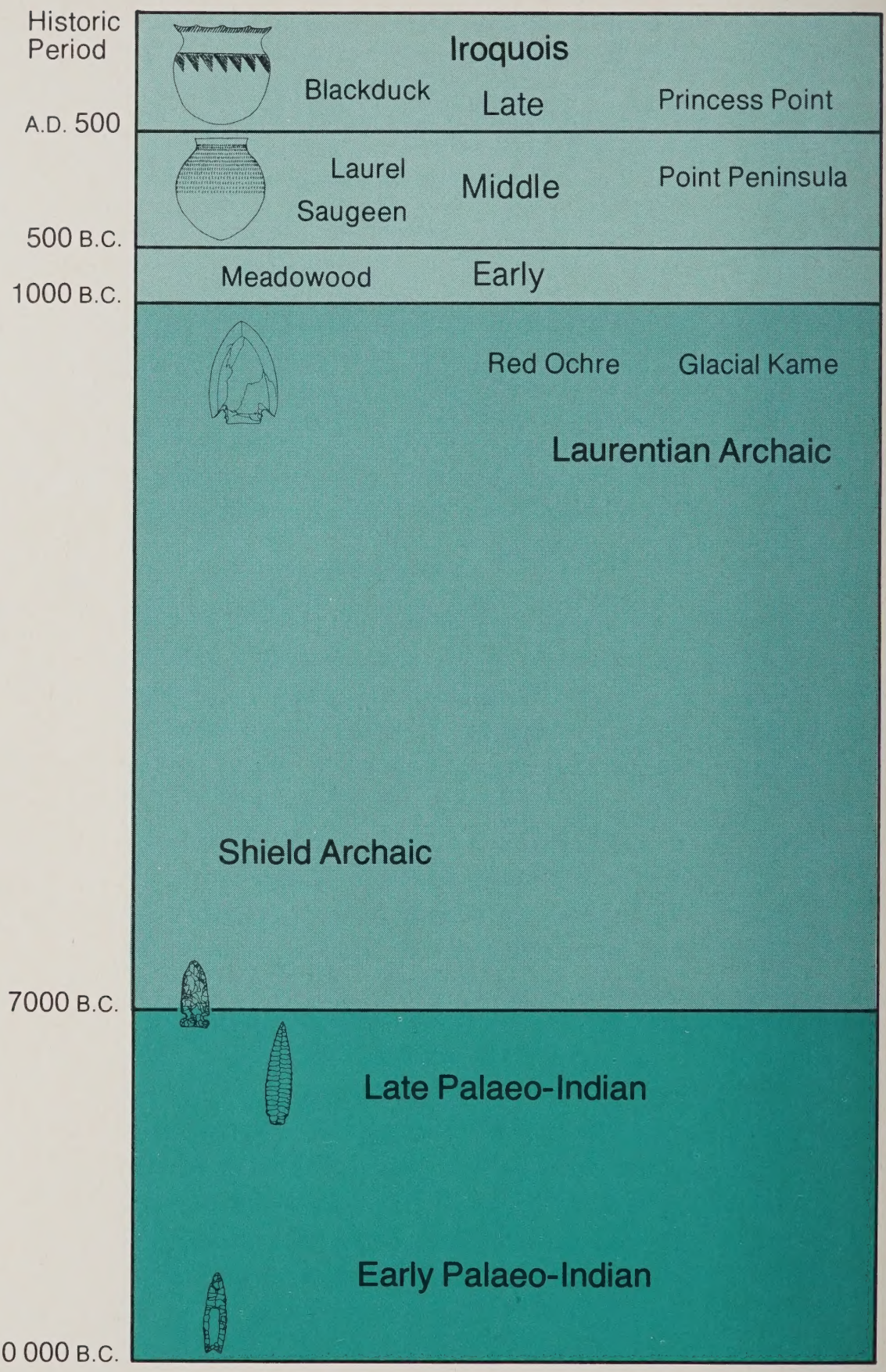
Ontario Prehistory

The prehistory of Ontario can be divided into three major time periods: the Palaeo-Indian period (10 000[?] to 7000 B.C.), the Archaic period (7000 to 1000 B.C.), and the Woodland period (1000 B.C. to the time of European contact). The Woodland period, in turn, can be subdivided into Early (ca. 1000 to 500 B.C.), Middle (500 B.C. to A.D. 500), and Late (A.D. 500 to historic).

THE PEOPLING OF THE NEW WORLD

Sometime during the final or Wisconsinan stage of the last Ice Age (the Pleistocene epoch), small bands of hunters crossed over to the New World by way of a vast land bridge connecting Siberia and Alaska. It is not known exactly when these earliest migrations occurred, but evidence suggests that man arrived in North America at least 20 000 years ago and possibly earlier. Fragments of bone from the northern Yukon and elsewhere, which look as if they have been broken and used as tools, have been dated to as early as 27 000 years ago, but more research must be carried out before we can establish the date of man's first appearance in the New World.

The earliest occupations in the New World that have been well dated are those of Palaeo-Indian hunters and gatherers, who appear somewhat abruptly in the archaeological record approximately 12 000 years ago. These people may have been the descendants of Palaeolithic hunters and gatherers who crossed the land bridge from Siberia during a major wave of migration that possibly began several thousands of years earlier in central and eastern Europe. Once they had arrived, these people developed a distinctive New


Historic Period
A.D. 500
500 B.C.
1000 B.C.
7000 B.C.
10 000 B.C.
Iroquois
Blackduck
Late
Princess Point
Laurel
Saugeen
Middle
Point Peninsula
Meadowood
Early
Red Ochre
Glacial Kame
Laurentian Archaic
Shield Archaic
Late Palaeo-Indian
Early Palaeo-Indian
Woodland Period
Archaic Period
Palaeo-Indian Period

World culture and ultimately spread over much of North and Central America. One of their most characteristic tools was the so-called "fluted" point, which was lashed to a spear. The "flute" is the long groove or channel in the middle of the point, formed by removing one or more large flakes by a blow or pressure directed at the base. Both faces of the point were usually fluted so that the point could be more firmly attached to a spear.

Palaeo-Indian peoples were accomplished big-game hunters. In western North America they hunted the largest and some of the most distinctive mammals of the closing phase of the Ice Age—the Columbian and Imperial mammoths, several extinct forms of bison, and, to a lesser extent, camel, horse, tapir, peccary, and four-horned antelope.

Right: Serrated bone skin-working tool from Old Crow River, northern Yukon Territory. This tool was made from the leg bone of a barren-ground caribou which died about 27 000 years ago. This does not necessarily mean that man was in the Yukon at such an early date, for the bone could have been preserved by freezing for thousands of years before it was made into a tool. Cast courtesy of The Archaeological Survey of Canada, National Museum of Man. (× 0.66)

Left: Early Palaeo-Indian "fluted" projectile point hafted to a simulated bone foreshaft. (About actual size)

EARLY MAN IN ONTARIO
10 000(?) – 7000 B.C.

Small bands of Palaeo-Indian peoples from the central United States probably began moving into southern Ontario during the early stages of glacial retreat. Until a few years ago, the only evidence of their presence here was a few widely scattered fluted points that had been found on the surface of ploughed fields. Recently, however, several occupation sites have been found. These suggest that Early Palaeo-Indian peoples moved into Ontario about 10 000 to 12 000 years ago and lived on the shores of large glacial lakes in a tundra and spruce parkland environment. They may have hunted barren-ground caribou, which lived in Ontario at that time and are known to have been hunted by related peoples in Michigan and New York State.

Between 8000 and 11 000 years ago, Late Palaeo-Indian peoples from the Plains moved into Ontario from the west along the north shore of post-glacial lakes occupying the Superior basin, and from the south around lakes in the Huron, Erie, and Ontario basins. These people were also hunters and gatherers. Their spear points were not fluted but

Left: Early Palaeo-Indian fluted spear point. The flutes were formed to thin the point so that it could be more securely attached to a bone foreshaft or wooden lance. (About twice actual size)

can be identified by their lanceolate or leaf-shaped outline, concave base, and ground edges on the sides or the base. These people often camped on ancient beaches which are as much as 60 m above today's lake levels. Because of this, and because they are obviously related to Late Palaeo-Indian or Plano peoples on the Plains, they are often known as Aqua-Plano.

Palaeo-Indian peoples probably lived in Ontario until 8000 or 9000 years ago. At that time some groups moved out of the province, following the glacial ice as it retreated northward. Other groups gradually changed their way of life to adapt to the new post-glacial environments and became involved in the emerging Archaic cultures.

Above: Late Palaeo-Indian spear points. The artifact on the right is a knife; the oblique edge was the cutting surface. (× 1.2)

THE ARCHAIC PERIOD
7000–1000 B.C.

The Archaic period extended from about 7000 to 1000 or 900 B.C. The two major cultural traditions in Ontario are known as the Shield Archaic and the Laurentian Archaic. Shield Archaic peoples lived for the most part on the Precambrian Shield in northern and central Ontario. Laurentian Archaic peoples lived in the southern part of the province south of the French River and Lake Nipissing. Ontario was probably very sparsely occupied during the earlier parts

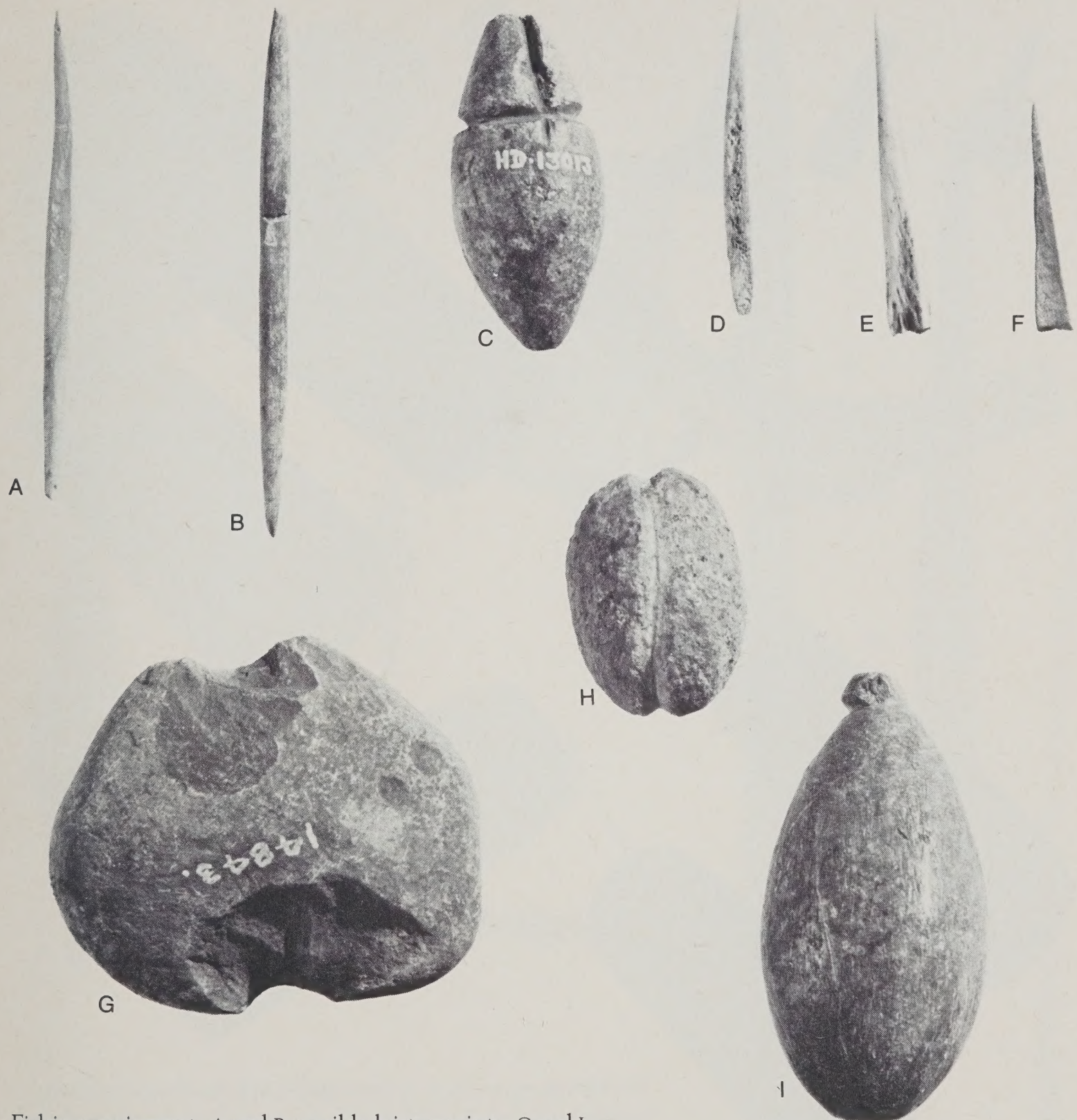
Late Archaic polished stone artifacts. Although these objects are called "banner stones", their function is not known. (× 0.4)

of this period, but after about 3000 B.C. the population seems to have increased substantially, at least among Laurentian Archaic peoples. Elaborate burial practices such as Glacial Kame and Red Ochre appeared during the latter part of this period in southern Ontario. At this time native copper was also extensively used for making a wide variety of tools and ornaments which were often placed with the dead. Both Laurentian and Shield Archaic peoples lived by hunting, gathering, and fishing.

The following pages show various kinds of tool kits that were probably used during the Archaic period. Some of these tools, such as the polished stone gouge, semi-lunar knife or ulu, bevelled adze, and plummet, were apparently made only by Late Archaic peoples. Most, however, such as the end and side scrapers, stone drills, bone awls and needles, antler flakers, hafted beaver-incisor cutting tools, shaft wrenches, and spokeshaves, were used during all periods of prehistory.

Early and Middle Archaic points. The point above left is probably a Middle Archaic point. Above right is an Early Archaic bifurcate (split) base point. On the far right are Early or Middle Archaic points. (× 0.9)

Some of the tools used to make other tools. A and C chert fragments for tool making, B antler "shaft wrench", D and E antler flakers for chipping stone, F abrading stone for grinding and polishing stone. (× 0.58)



Fishing equipment. A and B possible leister points, C and I plummets, D–F possible bone points from compound fish hooks, G and H netsinkers. (× 0.85)

Woodworking tools: A–C stone drills, D hafted beaver-incisor cutting tool, E pecked stone adze or axe and gouge, F Lamoka-type bevelled adze, G celt, H polished stone gouge, I pecked stone axe or adze. (× 0.5)

Copper artifacts, Late Archaic period: A copper nugget, B scraper, C socketed "spud" or axe head, D pike, E tanged knife, F tanged point, G split-shouldered point, H fish-tail tang point, I crescentic knife, J gaff hook. (× 0.35)

The Dioramas: Images of Prehistoric Life in Ontario over the last 12 000 years

The illustrations in the eight pages that follow are from dioramas formerly in the Royal Ontario Museum designed to show human activities during each of the major time periods of Ontario prehistory. Each of them illustrates how certain artifacts were used in their cultural and environmental setting and provides an image of a way of life or a cultural activity that serves to characterize the time period or our knowledge of it.

Early Palaeo-Indian Campsite ca. 11 000 years ago

The illustration on the facing page represents an Early Palaeo-Indian campsite of approximately 11 000 years ago. These were probably the first people to occupy Ontario after the final retreat of glacial ice.

The man is wearing boots, leggings, and a hooded parka made of skins of barren-ground caribou. This species of caribou is believed to have lived in southern Ontario during the Late Pleistocene at a time when the area was covered with tundra or tundra-like vegetation and sparse stands of spruce.

While Early Man may have been a big-game hunter, he probably also hunted or trapped a variety of smaller game, such as the snowshoe hare in the background(A), and collected seeds, berries, and edible plants whenever the opportunity arose.

The chert flakes(B) scattered on the ground in a crescent in front of the man are the waste material from tool manufacture. These small flakes may be the *only* evidence of the location of specific work areas, whether used by individuals, as in this case, or by family groups. Such areas, only on a much larger scale, have been found at the Debert site, an Early Palaeo-Indian site in Nova Scotia.

The caribou-skin bag(C) was made relatively recently by the Naskapi but it may well resemble a type of skin container made by Early Man. The artifacts on the bag include two chert cores (D—material for tool making), a bone foreshaft bevelled at both ends(E), a "shaft wrench" (F—the artifact that looks like an eyebolt) used for straightening bone or

wooden shafts(G), one hafted and three unhafted end scrapers(H) used for de-fleshing skins, three fluted spear points, and two flake gravers (I—flakes with small, sharp tips used for piercing or incising).

The fluted point was probably either hafted to a spear or attached to a bone foreshaft which itself was hafted to a spear or fitted into a socket. Together the two hafting methods could have given the hunter greater flexibility in killing his prey. By carrying several armed foreshafts with him, he could rearm a single spear and wound an animal several times without having to carry several spears. He could then have used the spear with a fixed foreshaft to finish off the weakened animal at close quarters. However, this remains speculative.

The artifacts on the piece of leather in the foreground include a bone foreshaft(J) intended to fit into a socket, a coil of sinew(K) used in hafting, and the base, mid-section, and two tip fragments of broken fluted points(L).

Late Archaic Metalworking Site
3000–1000 B.C.

The illustration on the facing page represents a man in the process of making copper tools. A great deal of what we know about this time period is based on burial sites, caches of artifacts, and isolated surface finds, since few occupation sites have been found.

The people who made these copper tools were the earliest known metalworkers in North America. The copper was obtained mainly by mining outcrops that contained nodules or veins of the metal in a relatively pure form. Alternate heating and cooling with fire and water were used to shatter the rock containing the copper. Large boulder hammers and wooden levers were also used in excavating the mines, which are as much as 8 m deep. There are thousands of prehistoric mining pits in the Lake Superior basin along the Ontario shore of Lake Superior, on Isle Royale, and in the Upper Peninsula of Michigan.

Smelting and casting were unknown. The copper was shaped into tools and ornaments entirely by cold-hammering and annealing. Annealing was accomplished by heating the metal to a temperature below the melting point. This altered the crystalline structure of the metal so that it could be hammered into shape without becoming brittle and cracking. The copper artifacts were traded widely and are often found in large numbers in caches and with burials.

The three chert scrapers or cutting tools(A) in the foreground are made of a type of chert known as "Knife River flint" or "chalcedony". This material probably came from a source in North Dakota and its presence indicates widespread trade contacts. The small nodule of "free" copper(B) and the large fragment of copper ore in the foreground(C) illustrate two forms in which copper was available.

A
B
C

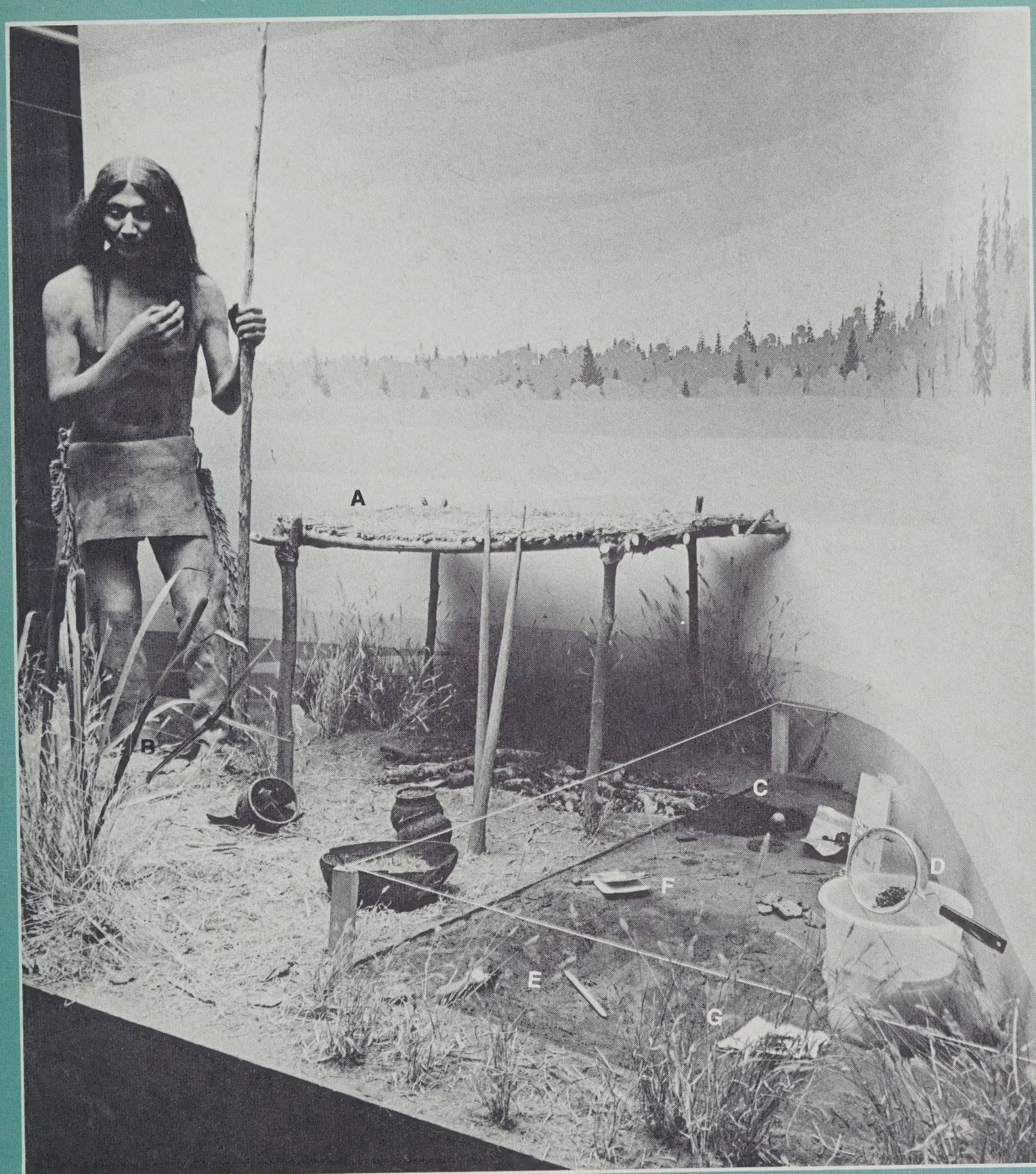
Algonquin Wild Rice Harvesting Site
ca. A.D. 1200

Here we see a reconstruction of a Late Woodland period Algonquin wild rice harvesting site around A.D. 1200. During the historic period wild rice was an important resource in Ontario and in the upper Great Lakes region. Recent archaeological evidence from Michigan and Minnesota suggests that it may also have been widely used prehistorically during the Late Woodland period, or possibly even earlier.

The rice grains were dried either in the sun or on a rack(A) over a low fire as in the diorama, or were parched in a kettle over an open fire. The grains were then placed in a shallow clay- or skin-lined pit(B) and walked over until the husks were broken away. This pit is also sometimes called a "jigging pit" because of the "dance" performed to remove the husks.

The archaeological display on the right illustrates one simple method of water separation used to recover small seeds and other charred plant material. The soil from a storage pit or, as in this case, a firepit(C) is dumped into a pail of water(D) and stirred thoroughly. Any charred seeds and small charcoal fragments will float to the surface, where they can be scooped off with a hand strainer or filter paper.

The shallow basin(E) in the foreground is the only trace that might be left of a jigging pit. Two filled-in post-holes(F) in the back are the remains of a drying rack. The charcoal sample (G) will be wrapped in aluminum foil for protection before being taken for dating by carbon-14 analysis.


A
B
C
D
E
F
G

Iroquoian Village
Post-A.D. 1400

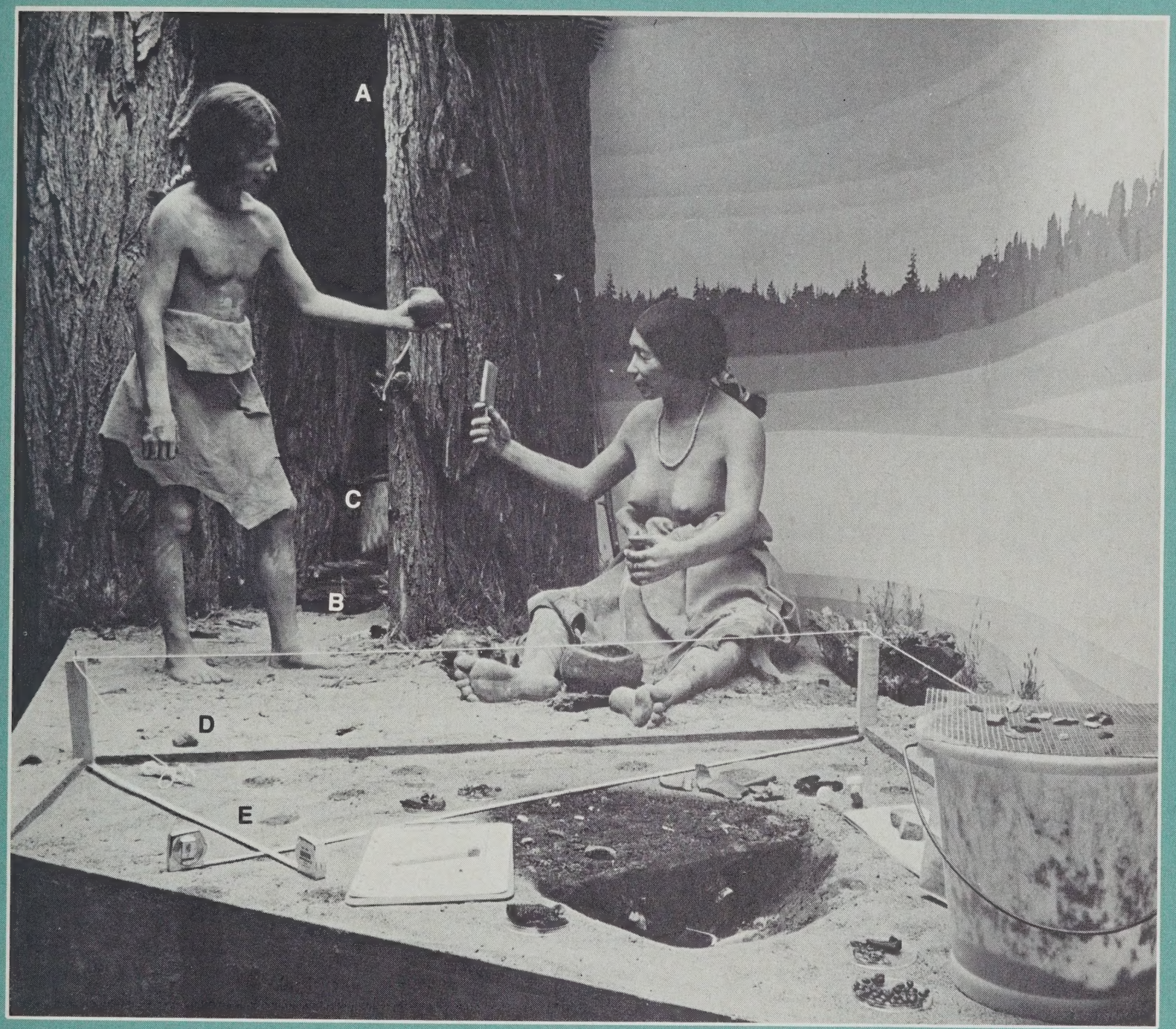
The fourth illustration in this series represents a Late Woodland period Iroquoian village dating from after A.D. 1400. The child is standing near the entrance of a shed(A) built on the side of a longhouse. The Iroquoian longhouse was between 6 and 9 m wide and between 12 m and as much as 90 m or more long. The average house was perhaps 8 m wide and nearly 30 m long. From 4 to 10 families comprising 80 or 90 people may have lived in the longhouse. The house had a domed roof and was built with a framework of cedar poles covered with elm bark. A village might consist of 12 or more houses enclosed by a single or multiple stockade of closely spaced posts for defence.

The shed attached to the longhouse was probably used for storing firewood and other objects. The sharpened ends of several cedar posts(B) used in house construction can be seen lying on the ground against the house wall. Resting on these is an Algonquin bark container(C) used for collecting maple syrup. This is one type of object that could have been obtained through trade with Algonquin hunters and gatherers.

The woman is teaching her daughter how to make pottery. Fragments of broken pottery(D) made by children are scattered about on the ground.

The archaeological excavation in the foreground shows some of the things an archaeologist uses to reconstruct the way of life of a prehistoric people. The small, dark, circular stains(E) are filled-in post-holes that could have been left by drying racks, tripod supports over cooking fires, house walls, or stockade lines. These must be exposed by careful excavation and then mapped in order to reconstruct the floor plans of the houses and their arrangement within the community. Filled-in storage pits and hearths often contain animal bones and charred seeds and nuts.

The Ontario Iroquois lived mostly by cultivating domesticated plants, although hunting, fishing, and the gathering of wild plant foods were also important and, indeed, occasionally critical for survival. The three most important cul-



tivated plants were corn, beans, and squash. Examples of these can be seen in the small plastic dishes around the partly excavated firepit. Corn was domesticated in central highland Mexico perhaps as early as 3 000 or 4 000 years ago and first made its appearance in Ontario about A.D. 400 or 500. As these archaeological examples indicate, the cobs were very much smaller than in modern varieties.

THE WOODLAND PERIOD

The Woodland period is defined, somewhat arbitrarily, as beginning with the appearance of pottery and burial mounds in the northeast, both of which were probably introduced from the south. Except for the presence of pottery and the addition of new elements in burial ceremonialism, however, the way of life remained much the same as in the preceding Archaic period until the introduction of cultivated plants, especially corn, from the south about A.D. 400–500.

Early Woodland Period
1000–500 B.C.

Very little is known about Early Woodland cultures in Ontario. A number of different styles of projectile points and other artifacts, such as carved stone vessels, pottery, birdstones, bar amulets, "blocked-end" tubular pipes, and gorgets, appeared for the first time in Early Woodland cultures in the northeast and have been found as isolated surface "finds" in southern Ontario. However, it is still not known whether these artifacts were brought here by hunting parties from New York or elsewhere, or were acquired through trade by indigenous peoples belonging to as yet unrecognized cultures, or whether they were brought into the province by the colonizing movement of peoples from New York State.

Some of the earliest pottery in Ontario may well have been brought into the southern part of the province by peoples of the Meadowood culture centred primarily in central and western New York. Meadowood artifacts, particularly the distinctive side-notched Meadowood point and the characteristic pottery, have been found widely as surface material in southern Ontario.

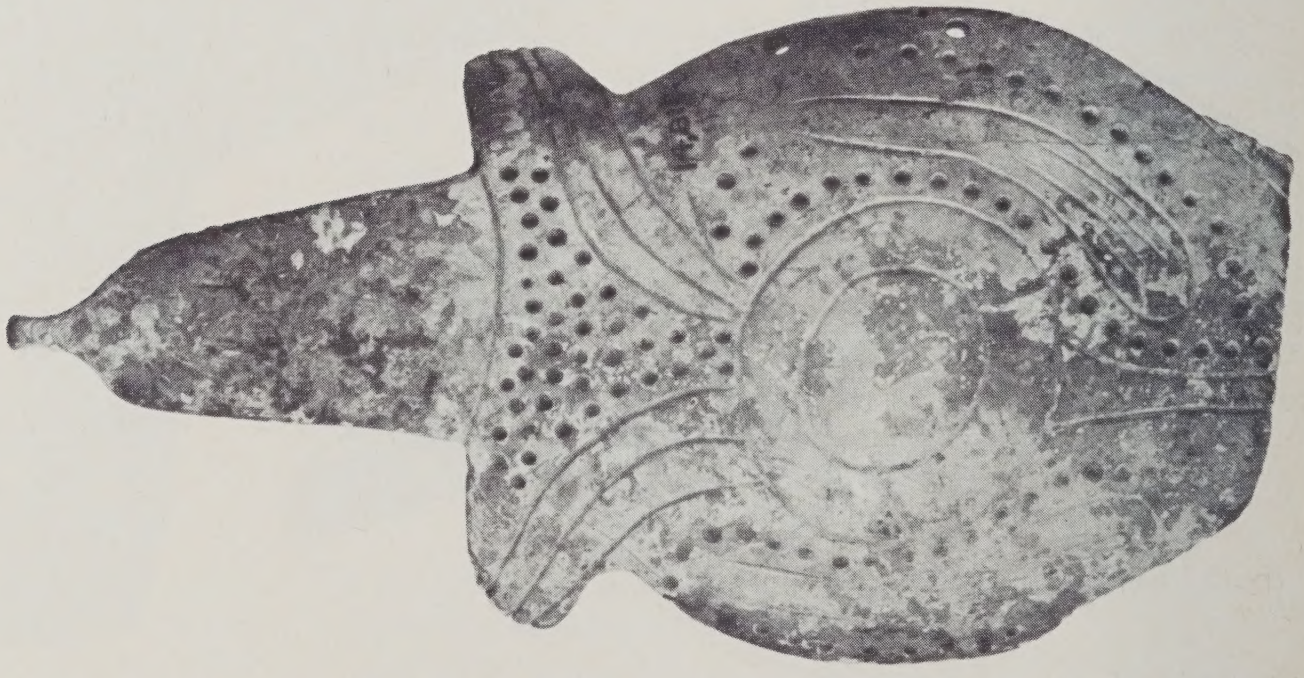
Left: A pentagonal gorget, an artifact of the Meadowood culture, Early Woodland period. (× 0.62)

Top: Late Archaic-Early Woodland carved stone vessel. (× 0.5)
Middle: Birdstone, Early Woodland period. (× 0.72)
Bottom: Birdstone, Early Woodland period. (× 0.75)

Middle Woodland Period
500 B.C.–A.D. 500

Three different but closely related cultures have been identified in Ontario during the Middle Woodland period and the early part of the Late Woodland period. These are the Laurel culture in northern Ontario, particularly in the Rainy River district, the Saugeen culture in southwestern Ontario in the vicinity of lakes Huron and Erie, and the Point Peninsula culture in southeastern Ontario east of Toronto. As is customary in archaeology, each culture takes its name from the site where it was first identified or from a nearby geographical feature.

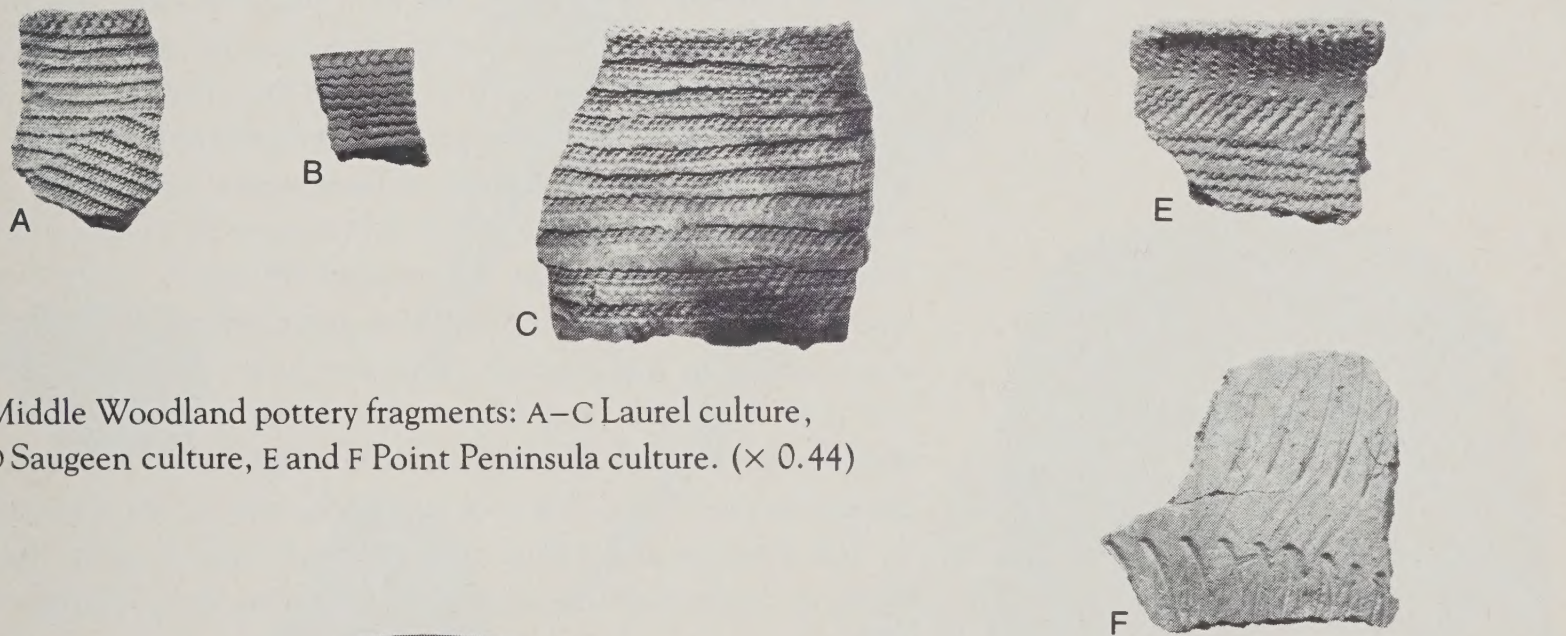
The pottery of the Laurel, Saugeen, and Point Peninsula cultures is generally similar in that many of the same methods of decoration were used. The most prominent of these were a wavy or sinuous stamp resembling the edge of a mollusc shell (and hence referred to as pseudo-scallop-shell stamping), and various other stamps made with plain or toothed objects. The overall similarity in pottery decoration indicates a close cultural relationship among these groups, resulting from trade, and perhaps occasional intermarriage,



Shell gorget (turtle effigy) from the Middle Woodland period. (× 0.7)

and from the shared influences of other cultures to the south and east. Despite this, however, the separate identity of each culture is shown by differences in the characteristics of the clay used in making pottery, the size of the tool used in decorating and the manner in which it was used, and the extent to which certain types of decoration were employed.

Both Laurel and Point Peninsula peoples built large and impressive burial mounds, of which the Point Peninsula Serpent Mound on Rice Lake near Peterborough is probably the best known. The idea of building mounds was probably adopted from peoples in the Mississippi, Illinois, and Ohio river valleys in the central United States. From this area, too, came many exotic trade items that were obtained by Saugeen and Point Peninsula peoples and ultimately buried



Middle Woodland pottery fragments: A–C Laurel culture, D Saugeen culture, E and F Point Peninsula culture. (× 0.44)

Polished stone platform pipe, Laurel culture. (× 0.81)

with their dead. Among these were marine shells from the Gulf of Mexico, stone and copper spools used as ear ornaments, sheets of cut mica, stone platform pipes, pipestone, pan-pipes, and head-dresses made partly from pieces cut from the skull and jawbone of wolf and bear. Some of these items, such as the ear spools and pan-pipes, were made locally from copper from the Lake Superior region and silver from northern Ontario.

It is difficult to say what social significance mound burial may have had for Laurel and Point Peninsula peoples. At the Serpent Mound site, the largest mound is what is known as an accretion mound; that is to say, it was built up gradually over a period of 200 or 300 years rather than on a single occasion. The other mounds may also have been constructed over a number of years. This fact suggests that the area probably had some ceremonial significance which would periodically bring people from the surrounding area to the site. It is not clear how individuals were selected for burial in the mounds. Bodies of people of both sexes, ranging in age from only a few months to 40 or 50 years, were buried in pits below the mound and in the mound fill itself. Individuals were buried both with and without grave offerings. It seems, therefore, that high social status was not a prerequisite for burial in a mound, and while some prominent people may have been interred, the mounds also seem to have served as general burial sites. This is in strong contrast to the situation in the Illinois and Ohio river valleys, where only high-ranking individuals and their retainers were buried in mounds.

Left: Polished stone sucking tube decorated with the figure of a frog, Laurel culture. Similar artifacts were used historically by shamans in an attempt to suck out foreign objects that were believed to cause illness. (About actual size)

Artifacts from the Point Peninsula culture, Middle Woodland period. A conch shell gorget, B shark tooth pendant, C and D antler arrow points, E toggling harpoon of antler, F quartzite knife, G and H silver ore from mines near Cobalt, I–K bone daggers, L pigment from mines near Cobalt. (× 0.5)

Late Woodland Period
A.D. 500 to European Contact

During the Late Woodland period, the northern and central parts of Ontario were sparsely occupied by small bands of territorially based nomadic hunters and gatherers, the ancestors of the Algonkian-speaking peoples of the historic period such as the Cree and Ojibwa. The southern part of the province bordered by lakes Huron, Erie, and Ontario was much more densely occupied by plant-cultivating village dwellers, the ancestors of the Iroquoian-speaking peoples, as well as by some Algonkians who, as a result of Iroquoian influences, practised some plant cultivation but were primarily nomadic hunters and gatherers.

The Algonkians

The region occupied prehistorically by the ancestors of the Algonkian-speaking peoples can be divided into three geographic areas corresponding roughly to spheres of cultural influence: the western area, extending from the northeast-

Blackduck culture pottery vessels. (× 0.5)

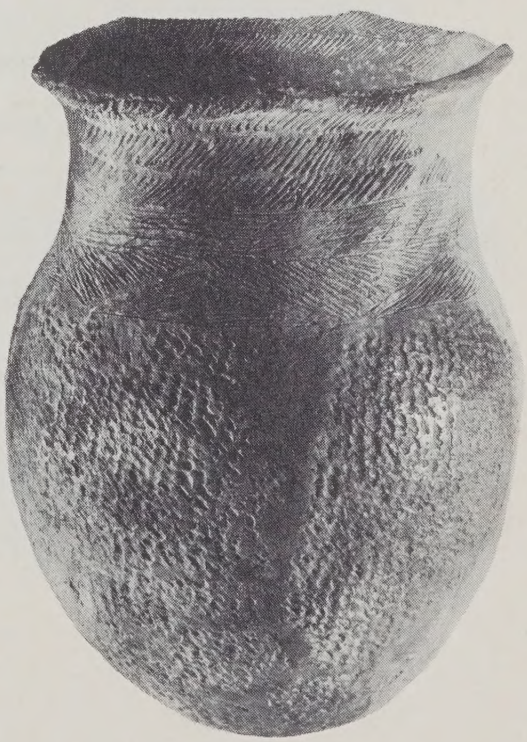
ern end of Lake Superior to the Ontario-Manitoba border; the northern area, extending north to Hudson Bay and south to Lake Abitibi; and the eastern area, encompassing the remainder of the province north of the area occupied by the Iroquois in the extreme south.

The western area of the region occupied by the Algonkians was the locale of the Blackduck culture. Archaeologists are divided in their opinions as to whether Blackduck people were themselves Algonkian or were a small Siouan enclave in a region dominated by Algonkians.

The Blackduck culture, dating from about A.D. 800 to 1400 or possibly the historic period, is an outgrowth, at least in part, of the preceding Laurel culture of the Middle Woodland period. Blackduck pottery is decorated with deep impressions made with a cord-wrapped stick and punctates made with the end of an object such as a blunted piece of bone or a reed. Some pottery may also have been decorated with basket or mat impressions. The dead were buried in graves at habitation sites or were placed on scaffolds in trees. The bones were occasionally reburied in low earthen mounds about 1 m high and 9 m or so in diameter. Specially made small mortuary vessels frequently accompany the burials. The Blackduck people probably lived by hunting, gathering, and fishing.

The Ontario Iroquois

At the time of European contact in the 16th and 17th centuries, southern Ontario was culturally and politically dominated by a relatively large and sedentary population of Iroquoian-speaking peoples. These village horticulturalists, related by culture and language to such tribes as the Erie, Susquahannock, Mohawk, Oneida, Onondaga, Cayuga, and Seneca, were organized into "nations" or loose confederacies of allied tribes which occupied several widely

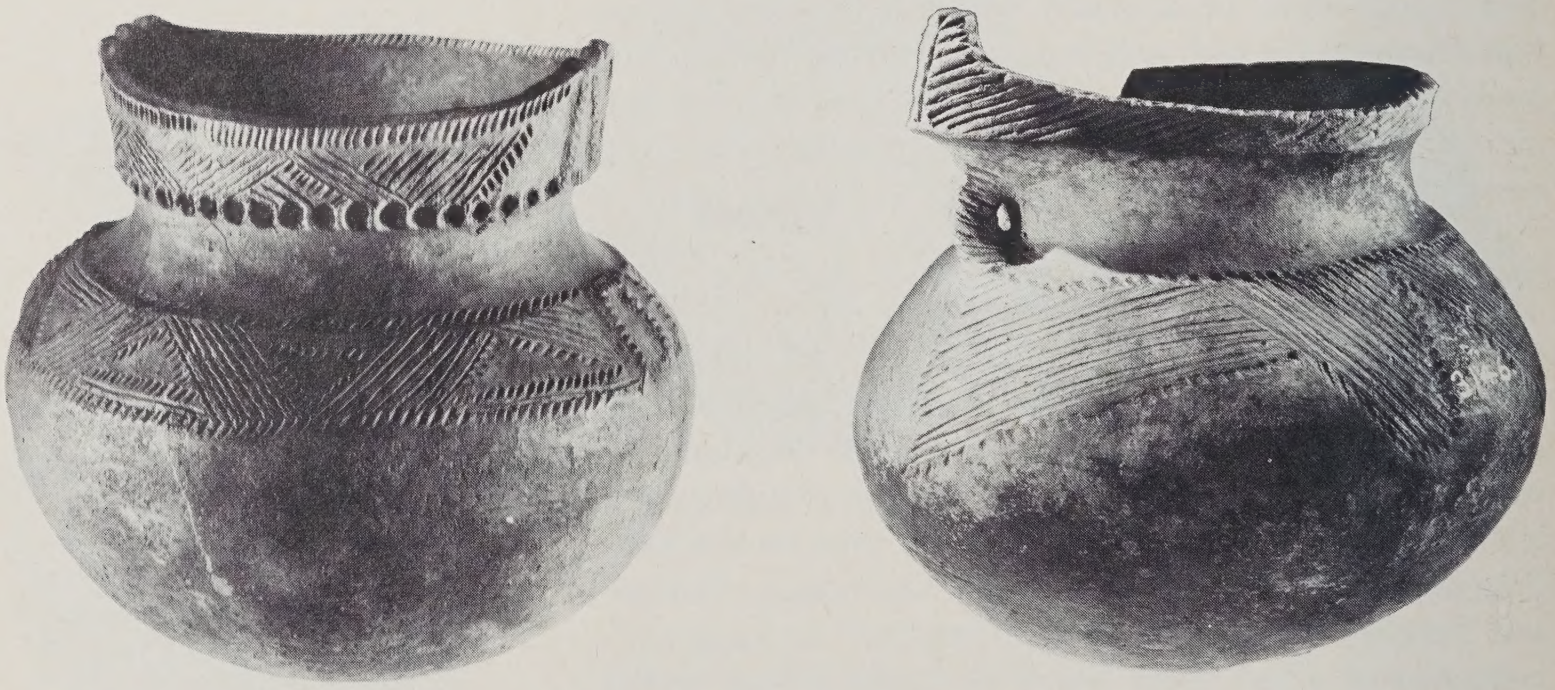


Right: Woodland-Early Iroquois (Glen Meyer culture) pottery vessel. (× 0.21)

separated but populous centres in eastern and southwestern Ontario. These nations included the St. Lawrence Iroquois, who lived along the north shore of the St. Lawrence River; the Huron, who lived between Lake Simcoe and Georgian Bay; the Petun or Tobacco, who lived in the Collingwood area; and the Neutral, who lived on the Niagara Peninsula between the Grand and Niagara rivers. Of these, the Huron probably had the largest population, numbering perhaps 18 000 or 20 000.

Contrary to what was once believed, the Ontario Iroquois were not newcomers into this area, but had a long history of indigenous cultural development which can be traced back to the beginning of the Late Woodland period.

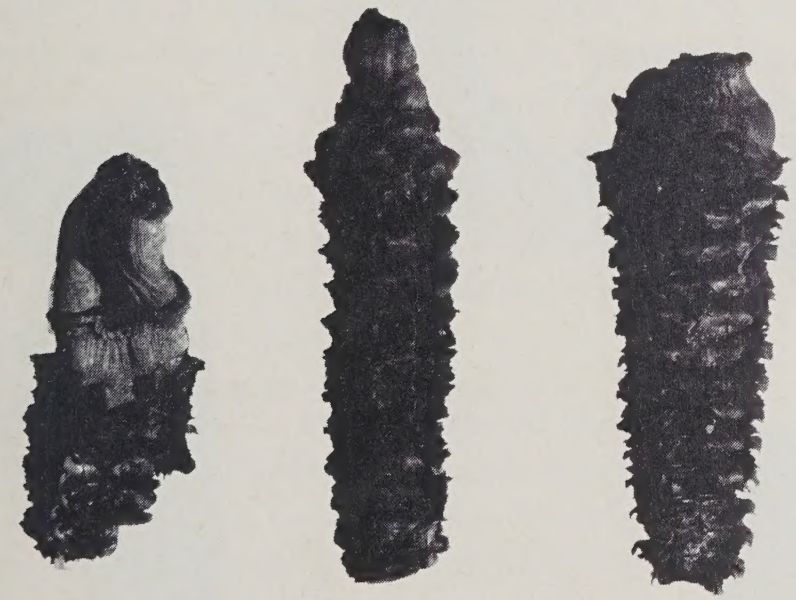
For some cultures, the Late Woodland period was a time of fundamental change from a territorially defined nomadic way of life based on a seasonal cycle of hunting, gathering, and fishing to a more sedentary village-oriented way of life based on plant cultivation. This transition also led to changes in social organization. It made possible a shift from a

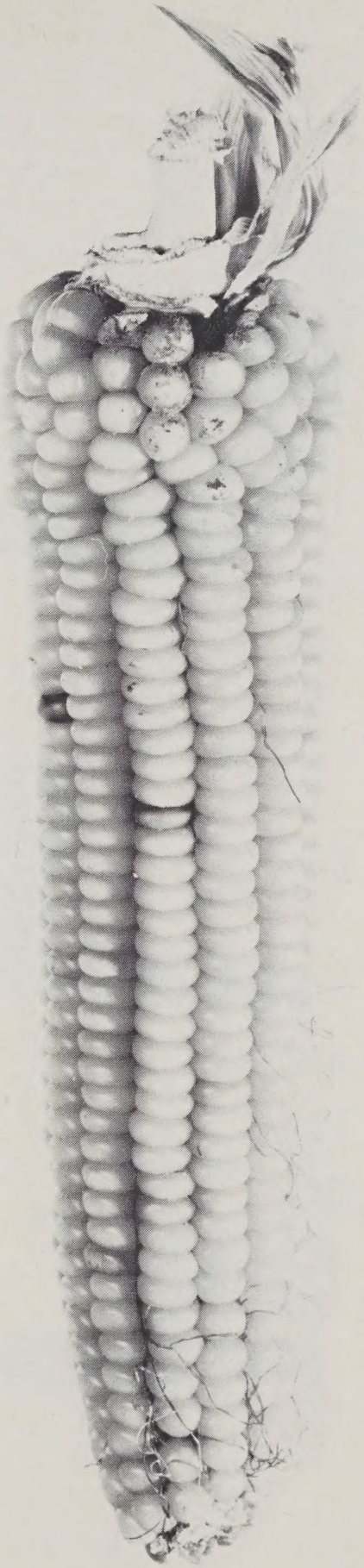


Above, left: Iroquois pottery vessel. Above, right: Later period Iroquois pottery vessel. (Both × 0.3)

simple band level of organization, based on the family, to the much larger and more complex tribal level. This very basic change was necessary before any higher levels of political organization, such as the confederacy of allied tribes or the nation in the modern sense, could be achieved. The story of this transition is also, in large part, the story of the development of the Iroquoian culture in Ontario.

The initial impetus for this transition was the introduction of plant cultivation into Ontario. Corn was the first domesticated plant to arrive. It was acquired by late Middle Woodland peoples (the recently recognized Princess Point culture) living between lakes Erie and Ontario between about A.D. 400 and 500. Within 200 or 300 years, plant cultivation had been adopted by other groups in southern





Far right: This corn is a modern hybrid, while the other three incomplete cobs (above) are a prehistoric variety grown by the Ontario Iroquois. The prehistoric cobs were burned and then discarded in a midden (refuse heap), where they were protected against breakage. Although the ends have been broken, the cobs were originally 6 to 8 cm long and had eight rows of kernels. The modern hybrid is more than twice as long and has twelve rows of kernels.

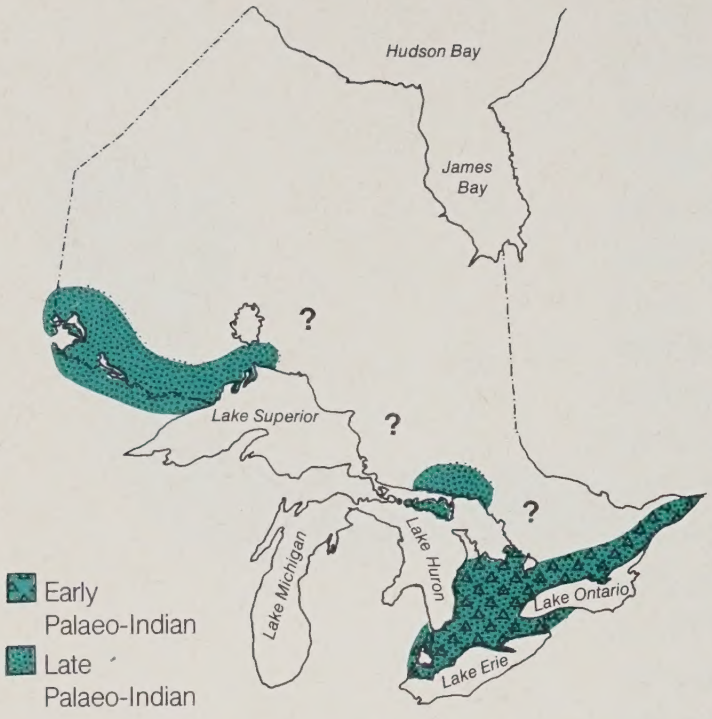
Ontario (Glen Meyer and Pickering) who belonged to the cultural stream that ultimately gave rise to the Ontario Iroquois. The appearance of semi-permanent villages of longhouses by A.D. 700–900 indicates that these people were well advanced in the transition to village farming and possibly to the tribal level of organization.

Iroquois pottery pipes. (Pipe at bottom right × 0.7. All other pipes × 0.55.)

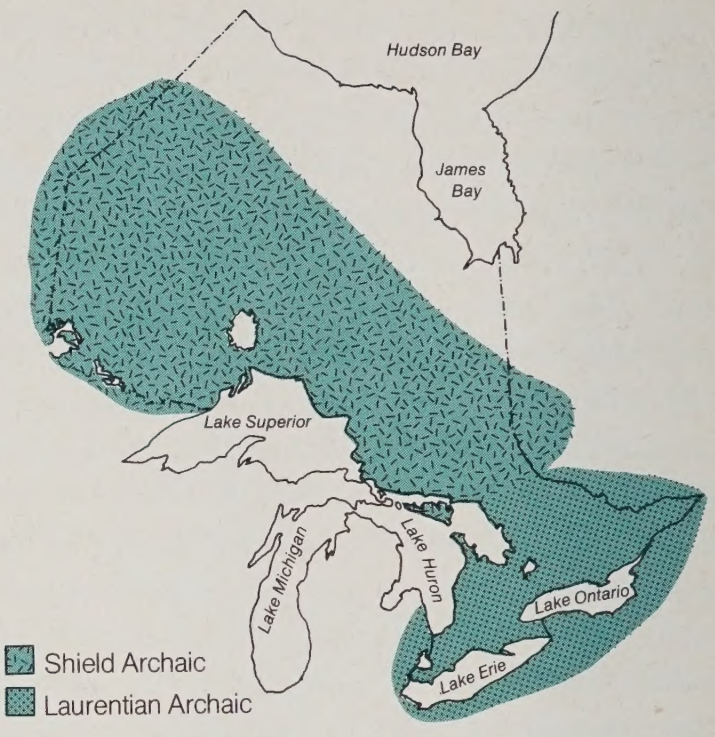
The other elements of the historic Iroquois culture gradually appeared as a result of both internal development and external influences from other cultures. Beans and squashes, which together with corn constituted the famous triad of American Indian domesticated plants, appeared only after A.D. 1400. The cultivation of sunflowers for their seeds began after 1300. Tobacco, apparently present in small quantities after 1000, suddenly became very important after 1350, when external influences stimulated the development of a remarkable complex of pottery smoking pipes, including both animal and human effigy forms. The pattern of large ossuary burial, the reburial of the bones of large numbers of people from several villages in a common grave, appeared late in the culture history. Finally, sometime after 1400, or possibly earlier in the case of the St. Lawrence Iroquois, Iroquoian cultural development differentiated into several closely related streams that eventually became the confederacies of tribes known at the time of European contact: the Erie-Neutral, Huron-Petun, and St. Lawrence Iroquois. From the moment of first contact with the French in 1535, only a little over 100 years elapsed before European diseases and native warfare over the fur trade brought about the final dissolution of these cultures.

Rock Paintings

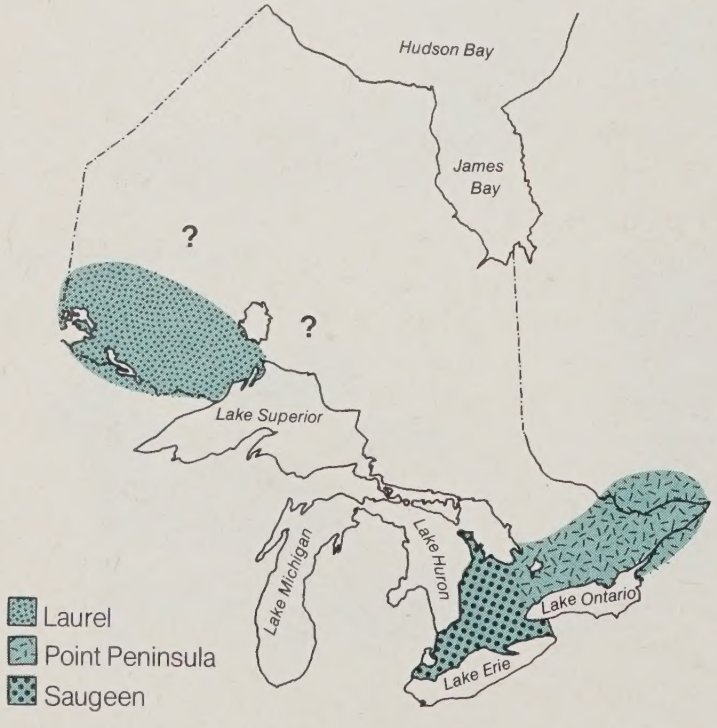
Rock paintings like the one reproduced here were probably made by shamans to record powerful visions. These represent only a few of the very large number of figures found on nearly 200 shoreline rock formations in northern Ontario. A few paintings, including those at the famous Lake Superior site at Agawa, are known to have been painted within the historic period, but many others are believed to be of prehistoric origin.



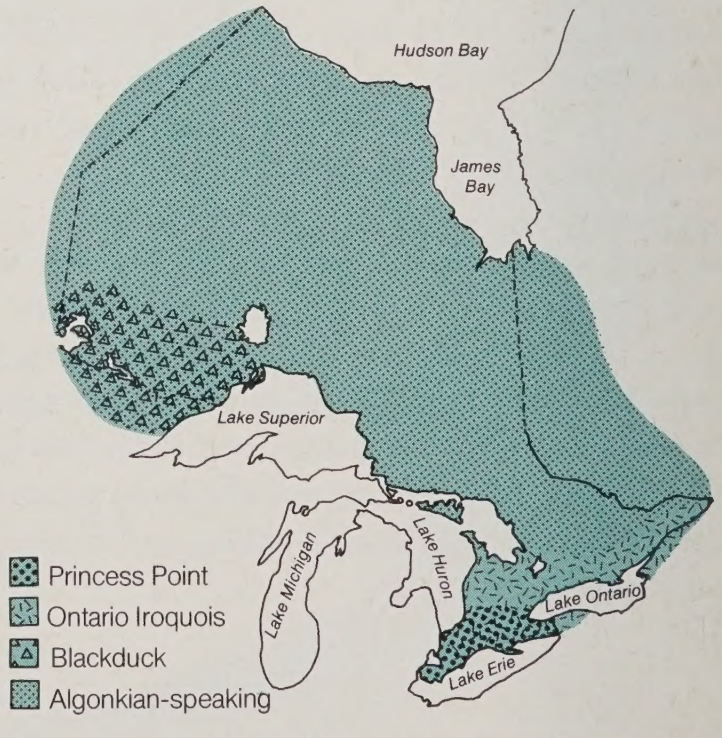
Distribution of Early and Late Palaeo-Indian peoples in Ontario during the Palaeo-Indian period.



Distribution of Archaic cultural traditions in Ontario during the Archaic period.



Distribution of Laurel, Point Peninsula, and Saugeen cultures in Ontario during the Middle Woodland period.



Distribution of cultural traditions in Ontario during the Late Woodland period.

Dewdney, Selwyn, and Kidd, Kenneth E. *Indian Rock Paintings of the Great Lakes*. Rev. ed. Toronto: University of Toronto Press, 1967. 191 pp.

Heidenreich, Conrad. *Huronia—A History and Geography of the Huron Indians 1600–1650*. Toronto: McClelland and Stewart, 1971. 337 pp.

Kenyon, Walter. "The Sands of Time." *Rotunda* 4, no. 3 (Summer 1971): 30–39.

Quimby, George Irving. *Indian Life in the Upper Great Lakes: 11,000 B.C. to A.D. 1800*. Chicago: University of Chicago Press, 1960. 182 pp.

Ritchie, William A. *The Archaeology of New York State*. Garden City: Natural History Press, 1965. 357 pp.

Storck, Peter L. "The Search for Early Man in Ontario." *Rotunda* 4, no. 4 (Fall 1971): 18–27.

——. "The Barest Trace: New Developments in the Search for Early Man in Ontario." *Rotunda* 7, no. 1 (Winter 1974): 4–9.

Tooker, Elisabeth. *An Ethnography of the Huron Indians 1615–1649*. Midland: Huronia Historical Development Council and Ont. Dept. of Education, 1967. 183 pp. Reprint of Bulletin 190 of the U.S. Bureau of American Ethnology, 1964.

Trigger, Bruce G. *The Huron: Farmers of the North*. Case Studies in Cultural Anthropology. New York: Holt, Rinehart and Winston, 1969. 130 pp.

Wright, J. V. *The Laurel Tradition and the Middle Woodland Period*. National Museum of Canada, Bulletin 217, Anthropological Series No. 79. Ottawa: Queen's Printer, 1967. 175 pp.

——. *The Ontario Iroquois Tradition*. National Museum of Canada, Bulletin 210, Anthropological Series No. 75. Ottawa: Queen's Printer, 1966. 195 pp.

——. *Ontario Prehistory: An Eleven-Thousand-Year Archaeological Outline*. Ottawa: National Museums of Canada, 1972. 120 pp.

ROM
Royal Ontario Museum

The new ROM INSIGHT SERIES focuses on concise, well-illustrated introductions to a variety of topics in the fields of art and archaeology— all written by recognized experts in their subjects.

Peter Storck's *Ontario Prehistory* is a general introduction to the cultural and economic history of early man in Ontario from the first Palaeo-Indian hunters and gatherers to the time of European contact. Illustrated with artifacts from the ROM's collections, the book includes a discussion of dioramas that depict human activities and a look at some of the techniques used in archaeological work.

Other books in the series
Canadian Georgian Furniture, Donald Blake Webster

Peter L. Storck, B.Sc., M.Sc., Ph.D., is Associate Curator in Charge in the Department of New World Archaeology. Since 1960 his yearly field work has taken him from southern Alaska to central Mexico. Dr. Storck's primary research interest is the earliest human occupations in the New World, and he brings to the ROM Insight Series his expertise in his area of specialization— the migration of hunting and gathering peoples in Ontario at the end of the last Ice Age.

ISBN 0-88854-275-5